

**This Page is Inserted by IFW Indexing and Scanning
Operations and is not part of the Official Record**

BEST AVAILABLE IMAGES

Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images include but are not limited to the items checked:

- ☐ **BLACK BORDERS**
- ☐ **IMAGE CUT OFF AT TOP, BOTTOM OR SIDES**
- ☐ **FADED TEXT OR DRAWING**
- ☐ **BLURRED OR ILLEGIBLE TEXT OR DRAWING**
- ☐ **SKEWED/SLANTED IMAGES**
- ☐ **COLOR OR BLACK AND WHITE PHOTOGRAPHS**
- ☐ **GRAY SCALE DOCUMENTS**
- ☐ **LINES OR MARKS ON ORIGINAL DOCUMENT**
- ☐ **REFERENCE(S) OR EXHIBIT(S) SUBMITTED ARE POOR QUALITY**
- ☐ **OTHER: _____**

IMAGES ARE BEST AVAILABLE COPY.

As rescanning these documents will not correct the image problems checked, please do not report these problems to the IFW Image Problem Mailbox.



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/409,305	09/29/1999	CRAIG D. ULLMAN	4967.00	5182
25227	7590	09/08/2004	EXAMINER	
MORRISON & FOERSTER LLP 1650 TYSONS BOULEVARD SUITE 300 MCLEAN, VA 22102			WILLETT, STEPHAN F	
			ART UNIT	PAPER NUMBER
			2141	

DATE MAILED: 09/08/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/409,305	Applicant(s) ULLMAN ET AL.	
	Examiner Stephan F Willett	Art Unit 2141	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on 17 May 2004.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 149-183 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 149-183 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 27 August 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Claim Rejections - 35 USC § 103

1. This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103 and potential 35 U.S.C. 102(f) or (g) prior art under 35 U.S.C. 103(a).

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 149-150, 158-161, 164-166, 169-170, 175-176 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Kramer et al. with Patent Number 6,327,574.

3. Regarding claim(s) 149, 158, 164, 170, 175, Becker teaches a page finder correlated based on user profiles. Becker teaches using profiles to determine the content to send to a user, col. 4, 5, lines 54-57, 1-4 and as the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used, col. 9, lines 8-10 or based on current usage or inheritance, col. 9, lines 59-60, and a unique user, col. 11, lines

Art Unit: 2141

11-12, 18-20, col. 10, lines 48-51. Becker teaches a network to transmit content to machines, col. 4, lines 13-18. Becker teaches inheritance of user profile attributes into the user profile from a group in which the user is a member as “values may be weighted by various categories ... the system can create and update a separate probability table for each category [group] to be used, col. 10, lines 47-64. Becker teaches fields to specify machine Ids, and a machine address, col. 5, lines 18-21 as standard handshaking that will clearly have a user’s machine address so the server can direct predicted information to a user/client. Becker teaches a hierarchical attribute value pair type data structure that can be called a donut which is simply defined as a data structure, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by each row in the table is associated with a particular currently-active page, col. 9, lines 13-14. Each entry in the table represents a historical probability col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above profile with a second type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and including “audio”, col. 3, line 51 and “video”, col. 1, line 26. Becker teaches the invention in the above claim(s) except for explicitly teaching a hierarchical attribute value pair data structure . In that Becker operates to generate user based documents, the artisan would have looked to the network data structure arts for details of implementing user matching. In that art, Kramer a related network system, teaches “the consumer profile includes hierarchical attribute vectors which encode attributes of a consumer at progressively higher levels of abstraction”, abstract, lines 14-16. Kramer specifically teaches

Art Unit: 2141

“annotating or replacing ... other media with (possibly) related multimedia content”, col. 6, lines 22-24 and “the characteristic value for an object will be represented as a vector [hierarchy]”, etc., col. 11, lines 1-5. Further, Kramer suggests the “TIC to construct the personal database and models of the consumer”, col. 5, lines 31-32 which will result from implementing his hierarchical attribute value (HAV) pair type data structures. The motivation to incorporate specifically a HAV insures highly related multimedia data is matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate said data structures as taught in Kramer into network system described in Becker because Becker operates with finding data in a computer network related to a user and Kramer suggests that better matching techniques can be obtained in networks. Therefore, by the above rational, the above claims are rejected.

4. Regarding claim(s) 150, 159, 169, 176, Becker teaches using an “object”, col. 7, lines 23-26.

5. Regarding claim(s) 160-161, 165-166, Becker teaches storing data structures in memory, col. 6, lines , col. 10, lines 3-5.

6. Claims 151-157, 162, 163, 167, 168, 171-174, 177-183 are rejected under 35 U.S.C. 103(a) as being unpatentable over Becker et al. with Patent Number 5,878,223 in view of Kramer et al. with Patent Number 6,327,574 and Savitzky et al. with Patent Number 6,012,083.

7. Regarding claim(s) 151, 162, 167, 177, Becker teaches a page finder correlated based on user profiles. Becker teaches a network to transmit content to machines, col. 4, lines 13-18. Becker teaches fields to specify machine Ids, and a machine address, col. 5, lines 18-21 as standard handshaking that will clearly have a user’s machine address so the server can direct predicted information to a user/client. Becker teaches using profiles to determine the content to

Art Unit: 2141

send to a user, col. 4, 5, lines 54-57, 1-4 and as the table becomes more useful, i.e. reflective of usage patterns [these are user usage patterns and are a user profile], the more the systems are used, col. 9, lines 8-10 or based on current usage or inheritance, col. 9, lines 59-60, and a unique user, col. 11, lines 11-12, 18-20, col. 10, lines 48-51. Becker teaches a hierarchical attribute value pair type data structure that can be called a donut which is simply defined as a data structure, col. 9, lines 1-10 that is dynamic and changes as different data is selected by a user as further taught by each row in the table is associated with a particular currently-active page, col. 9, lines 13-14. Each entry in the table represents a historical probability col. 9, lines 14-15 that is independent of the particular pages that a particular user selects. Becker teaches comparing the above profile with a second type data structure to determine whether to transmit content to the machine, but not the user as comparing to chose the data with the highest probability, col. 9, lines 38-40. Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and including “audio”, col. 3, line 51 and “video”, col. 1, line 26. . Kramer specifically teaches “annotating or replacing ... other media with (possibly) related multimedia content”, col. 6, lines 22-24 and “the characteristic value for an object will be represented as a vector [hierarchy]”, etc., col. 11, lines 1-5. Becker-Kramer teaches the invention in the above claim(s) except for explicitly teaching details that makeup a user-profile. In that Becker operates to generate user based documents, the artisan would have looked to the network arts for details of implementing user selections. In that art, Savitzky, a related network system, teaches “a web server to transform the requests from the Web client”, abstract, lines 2-3. Savitzky specifically teaches that a “feature calculator generates a feature list for a transaction by scanning the data element”, col. 6, lines 37-39 based on the user’s requests, “additional features

Art Unit: 2141

can be added at any time to the features calculator's known features", col. 6, lines 53-54 to highlight the data is independent of the calculated hierarchy, and an agent "modifies them according to filtering rules before documents are returned to a client", col. 11, lines 32-34 which also reads on a hierarchical attribute value data pair data structure . Further, Savitzky suggests that "the user typically accesses agency 10 by some action taken with a Web client to access to a Web server", col. 5, lines 1-3 will result from implementing his network system. The motivation to incorporate a user profile insures highly related documents are matched with a user. Thus, it would have been obvious to one of ordinary skill in the art to incorporate the user profile as taught in Savitzky into network system described in Becker because Becker operates with finding documents in a computer network and Savitzky suggests that optimization can be obtained with networks. Therefore, by the above rational, the above claims are rejected.

8. Regarding claims 152-153, 179, Savitzky teaches attributes of a user, col. 6, lines 55-60 and preferences of a user, col. 11, lines 29-30 with relevant hierarchies, col. 20, lines 65-66 via update queries, col. 21, lines 8-9, but Becker clearly queries users, col. 5, lines 13-15. Thus, the above claim limitations are obvious in view of the combination.

9. Regarding claims 156, 163, 168, 180, 182, Savitzky teaches the medium to include chat rooms, users, or services as the various type of agent services available, col. 6, lines 65-66.

Thus, the above claim limitations are obvious in view of the combination.

10. Regarding claims 157, 183, Becker teaches a TV and its related communication requirements, col. 3, lines 57-58 and col. 5, lines 4-9 and 18-23, and even "audio", col. 3, line 51. Thus, the above claim limitations are obvious in view of the combination.

11. Regarding claims 154, 171-174, Becker teaches transmitting selected information, col. 5,

lines 50-53. Thus, the above claim limitations are obvious in view of the combination.

12. Regarding claims 155, 178, 181, Savitzky teaches monitoring the activities of a user, col. 11, lines 28-29 and Becker teaches dynamically updating user profiles, col. 9, lines 24-25. Thus, the above claim limitations are obvious in view of the combination.
col. 9, lines 13-14 in Becker.

Response to Amendment

1. The broad claim language used is interpreted on its face and based on this interpretation the claims have been rejected.

2. The limited structure claimed, without more functional language, reads on the references provided. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

3. Applicant suggests and has added an obvious element "is used to enhance an audio video program", Paper dated 5/17/04, Page 8, lines 22, 25. However, Becker teaches user profile data is used to select web page data including "audio", col. 3, line 51 and "video", col. 1, line 26. In an effort to further prosecution and since the attributes of "hierarchical attribute value-pair data [and] structure[s]" as claimed is broad and has been argued, further non-obvious elements that makeup this data and structures is suggested. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

4. Applicant suggests "inheritance of user profile attributes into the user profile from a group in which the user is a member", Paper dated 5/17/04, Page 8, lines 22, 25. However, Becker teaches "values may be weighted by various categories ... the system can create and update a separate probability table for each category [group] to be used, col. 10, lines 47-64. For

Art Unit: 2141

example, an “entire subscriber database” [group] inherits the attribute to be able to view or not view pornography. Thus, Applicant’s arguments can not be held as persuasive regarding patentability.

5. Applicant suggests “the probabilities in the “prediction tables” are essentially user-profile information”, Paper No. 21, Page 20, line 17 and “the individual value pairs may be shared by different data structure hierarchies to define different entities, e.g. an individual or a group of individuals sharing the same piece of information”, Paper No. 11, page 9, lines 1-2 and “none of the references disclose ... a hierarchical attribute value-pair”, Paper dated 5/17/04, Page 8, line 22 . Correct and this is only one of many profile type information. Ironically, the group of ratings for a particular page “share the same piece of information” and use it independently depending on the user’s current page selection. A profile could be as simple as a “currently-active page”, col. 9, lines 13-14 in Becker. Also, Savitzky teaches an agent “modifies them according to filtering rules before documents are returned to a client”, col. 11, lines 32-34. Said rules read on a “hierarchical attribute value pair data structure” as claimed as understood based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. The data is independent of the hierarchical structure even though said data can also have a relation to the hierarchical attribute value pair data structure, but is shown as “additional features can be added at any time to the calculator’s known features”, Savitzky, col. 6, lines 53-54. Applicant suggests “features are added to the feature calculator and not to the feature list”, Paper No. 21, Page 25, lines 10-11. Such a limited interpretation is not reasonable based on the teachings since either feature data structure can be used as the user’s profile based on the particular user’s transaction

Art Unit: 2141

being resolved. A transaction is directly related to a user. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

6. Applicant suggests "Becker does not teach a system that finds pages based upon a user profile", Paper No. 17, Page 7, lines 11-12. "User profile" is another broad term that is taught in all three references, see Becker, a unique user, col. 11, lines 11-12, 18-20; Kramer, consumer profiles, abstract, line 8 that are clearly shared over a network; Savitzky's "user's interests", col. 11, lines 28-29 and a user's conduct in Table 2 qualifies as part of a profile broadly speaking. Thus, broad is used to explain that other definitions beyond the applicants' definitions have been applied to read on the claims as explained in regard to the whole claim, but while considering the specification's teachings in light of the whole claim and recognizing two may differ regarding "the remainder of which specifically teaches an interpretation different than that set forth", Paper No. 17, Page 16, lines 9-10. In addition, any of the other references cited clearly cite legacy user entered profiles as argued by the applicant, thus more references were not explicitly cited here. Also, the references should not be read in a vacuum, the teachings are not mutually exclusive, and must be taken in context of what was reasonable based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. To further prosecution, if the applicant intends a more defined definition, as argued with "user profile" and "attribute value pair data structure", then it should be specified in the claims so the public is clear on what is protected, and not based on what the applicant feels is "used in the context of the present case", Paper No. 17, Page 8, lines 7-8. Lastly, "explicitly does not teach" only means with regard to exact words or inherent teachings, but surely includes implicit, implied and obvious teachings, especially when vague

words are claimed, as has been argued by the Examiner. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

7. Applicant suggests "the hierarchical attribute value data pair data structure is quite different from other data structures, as is apparent from the many advantages ... the attribute value pair is independent of the hierarchical structure", Paper No. 8, Page 3, lines 2-3 and "the individual value pairs may be shared by different data structure hierarchies to define different entities, e.g. an individual or a group of individuals sharing the same piece of information", Paper No. 11, page 9, lines 1-2. The above argument is not commensurate with what is presently claimed and therefore will not be considered at this time. The presently claimed data structure is indistinguishable from a relational database where different data fields have varying importance or a dynamic relational database created by an agent via a calculation or filter which is taught as an agent "modifies them according to filtering rules before documents are returned to a client", col. 11, lines 32-34. Said rules read on a "hierarchical attribute value pair data structure" as claimed as understood based on the subject matter as a whole as would have been understood at the time the invention was made to a person having ordinary skill in the art to which the subject matter pertains. Obviously the data is independent of the hierarchical structure even though said data can also have a relation to the hierarchical attribute value pair data structure, but is shown as "additional features can be added at any time to the features calculator's known features", Savitzky, col. 6, lines 53-54. Thus, Applicant's arguments can not be held as persuasive regarding patentability.

Conclusion

8. Prior art made of record and not relied upon is considered pertinent to applicant's disclosure is disclosed in the Notice of References Cited, and note US Patent 5,802,368 and 6,546,387. The other references cited teach numerous other ways to push data to a user based on their profile, thus a close review of them is suggested.

9. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

10. A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

11. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Stephan Willett whose telephone number is (703) 308-5230. The examiner can normally be reached Monday through Friday from 8:00 AM to 6:00 PM.

12. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Rupal Dharia, can be reached on (703) 305-4003. The fax phone number for the organization where this application or proceeding is assigned is (703) 746-7239.

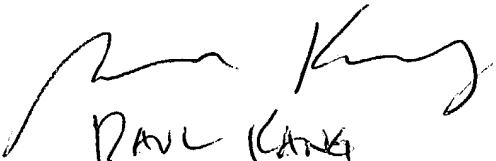
13. Any inquiry of a general nature or relating to the status of this application or proceeding

Art Unit: 2141

should be directed to the receptionist whose telephone number is (703) 305-9605.

sfw

September 7, 2004


PAUL KANG
PRIMARY EXAMINER